

312 9th Avenue North

ARC #3

Date: February 11, 2022



GRAPHITE

A.T. DENNY'S 5TH

901-HARRISON ST.

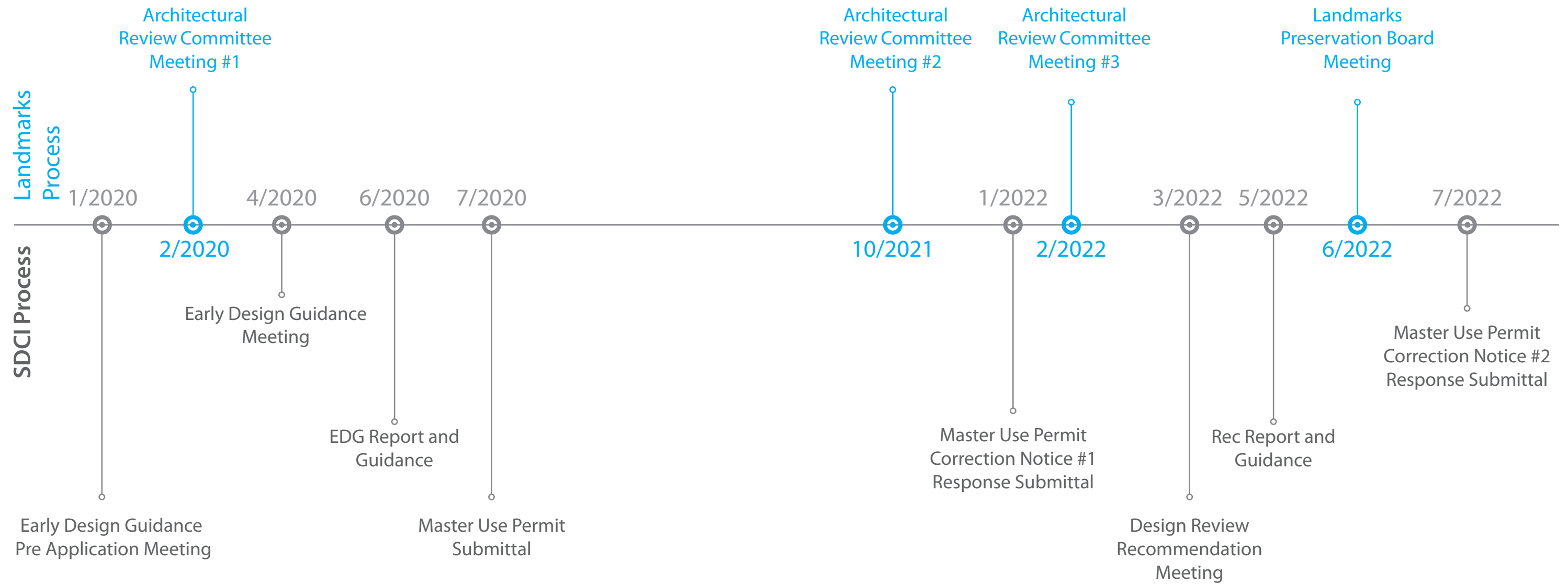
B-91. L-11.

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1. Project Timeline
2. Recap of ARC #2
3. Level 2 Open Window Terrace Solution
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6. Final Design for Recommendation Meeting

ARC #2 Recap (October 15, 2021)

- A. Provide a designed solution to the 9th Avenue N open windows condition for the L2 terrace.
See Pages 6 & 7
- B. Conduct a window survey to determine the best strategy forward on either repair or replacement of the historic windows on 9th Avenue N and Harrison Street.
See Pages 8 & 9
- C. ARC provided support to raising the mezzanine to work with the new proposed building and the removal of the portions of the facade illustrated by the design team.
See Page 17
- D. ARC members were pleased with the overall design and look forward to being briefed on the final overall project.
See Pages 21 through 27



1. | ARC#2 Response

- 1 Bleacher Seating
- 2 Tower Overhang / Bleacher Coverage
- 3 Daylight to Lease Space
- 4 Views to Street
- 5 Mesh Guardrail System

This diagram illustrates the design intent of incorporating the Level 2 terrace into the Landmark while promotion visual and auditory connections to the street below. Three concepts have been explored and are discussed on the following page. The design team believes **Option 3** best embodies the guidance from the “Secretary of the Interior’s Standards For Rehabilitation” excerpted below, as it most closely replicates the existing conditions and does not attempt to replicate the historic windows.

“New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.”

Existing Condition | 9th Avenue Facade



Precedent | The High Line, NYC



Example of proposed open mesh railing 5



Option 1: Replacement windows, no glass

In this option, the level 2 windows are infilled with replacement windows in the style of the original steel sash windows (1). Window panes are left open (no glass) to promote visual and auditory connection to the street from seating at the terrace (2). A guardrail with infill panels is required for fall protection (3). Woven metal mesh with a high degree of transparency is proposed as the guardrail infill material.

Option 2: Replacement windows, open position

Similar to Option 1, in this option the level 2 windows are infilled with replacement windows in the style of the original steel sash windows (1). Window glazing provides fall protection, but the awning window is proposed to be in the open position to promote visual and auditory connection to the street from seating at the terrace (2). A guardrail is required for fall protection (3), however no infill/mesh is required.

Option 3 (preferred): No window, interior guardrail

In this option, no infill windows are proposed (1). The existing openings will be left as open apertures to promote visual and auditory connection to the street from seating at the terrace (2). A guardrail with infill panels is required for fall protection (3). Woven metal mesh with a high degree of transparency is proposed as the guardrail infill material (see previous page for representative example).

STEEL WINDOW SURVEY
EXECUTIVE SUMMARY

Graphite Design Group contracted SHKS Architects to provide a window survey of the historic steel industrial sash windows on the building located at 901 Harrison Street, as part of a rehabilitation development project on that site. The site is also referenced as Block 46 / 912 Ninth Avenue North, but the historic address is used herein. The subject building is located at the southeast corner of Harrison Street and Ninth Avenue North in the South Lake Union neighborhood. Constructed in 1927, it was historically known as the Pioneer Sand and Gravel Company Building, and listed as a Seattle Landmark per Ordinance #125022 in 2014. It was designated under criterion D: it embodies the distinctive visible characteristics of an architectural style, or period, or method of construction, and Criterion F: because of its prominence of spatial location, contrasts of siting, age, or scale, it is an easily identifiable visual feature of its neighborhood or the city and contributes to the distinctive quality or identity of such neighborhood or the City. The controlled features include the exterior of the building and the site. Proposed changes to these features must be presented to the Seattle Landmarks Preservation Board for review and Certificate of Approval.

The window survey included a field visit by Matt Hamel of SHKS Architects on November 23, 2021 to document existing conditions: frame and sash materials, operability, hardware, finishes, and glazing types. Review of historic documentation included in the 2014 Seattle Landmarks Nomination Report, and historic tax record photograph. This report provides our assessment of the current condition of the remaining historic windows, and recommendations for their disposition as part of the project.

All photos in this report were taken on November 23, 2021 by SHKS Architects unless noted otherwise.



North facade, along Harrison Street

RECOMMENDATIONS

RESTORATION

Steel windows, and windows in general, are highly identifiable character defining features of an historic building. While the steel is subject to corrosion due to deferred maintenance, mechanical or chemical damage, or poor original detailing, they are in most cases resilient and repairable, either by removal for shop restoration, or in-situ repair, depending on the original construction detailing.

The majority of severe damage observed on the subject building is at the sills, ranging from flaking paint, cracked or missing putty, to steel delamination, full-depth corrosion, and severe warpage. Restoration would require a fairly invasive campaign to remove existing interior finishes to expose the attachments, selectively cutting out and field welding replacement sections that are beyond repair, epoxy putty repair of sections exhibiting minor deterioration, straightening sections that are sound but warped, removing existing putty and coatings to bare steel, treatment with rust inhibitor, and recoating with a robust corrosion-resistant primer, reglazing (ideally using remaining salvaged wavy glass where appropriate), and repainting. Improvements may include additional measures for moisture control via flashings or weeps, restoration of operability of the awning vents, and weatherstripping to reduce air infiltration.

Options to improve thermal performance of the existing sash and frame could include installation of an interior storm panel, replacing the existing single-pane glazing with either insulated glazing units (IGU) in the existing panes, laminated glazing, or a vacuum insulated glazing (VIG) unit within the existing muntin pattern. Insulated glazing units are typically 5/8" thick or more, which may be infeasible to fit in the existing slender steel section with an appropriate glazing stop. Unlike monolithic glass, the perimeter seals of the IGU have a limited life span of 10-20 years, requiring replacement when the seals fail. Laminated glass can improve both thermal and acoustic performance, would fit in the existing muntin profile, and does not present the risk of seal failure and condensation that IGUs do. The advantage of the VIG unit is a thin profile, approximately ¼" thick, composed of two panes of 1/8" glass separated by a grid of microspacers, and can thus more readily be installed with a similar appearance to the historic glazing compound beveled profile. In addition, the VIG unit is sealed with a fused ceramic perimeter, rather than a butyl or silicone perimeter seal. In all of the above glass options, the additional weight of a second pane of glass would require modifications to the existing hardware to support additional loads if the operable vents are to be restored.

Hazardous Materials:
With buildings of this era, it is likely that paints, glazing compounds, and sealants may contain some level of hazardous materials, most typically lead paints and asbestos in the glazing compound. Any restoration or removal and disposal should anticipate a survey of regulated building materials to confirm appropriate procedures for handling and disposal.

Resources:
National Park Service Preservation Brief 13, The Repair and Thermal Upgrading of Steel Windows
<https://www.nps.gov/tps/how-to-preserve/briefs/13-steel-windows.htm>

REPLACEMENT

In some cases, the extent of damage to the existing windows, in combination with other project goals warrant consideration of replacement. These may include aesthetic consistency, improved energy performance, modified operability, cost, and occupant comfort, among others. The condition of the subject windows are at a point where feasibility of restoration may be in question. While costs and schedule impacts are not considered here, specialty restoration contractors would require additional on-site labor time and costs, where new windows will have off-site lead time impacts. Evaluation of life cycle costs and carbon impacts are beyond the scope of this report, but in general, sequestered carbon in existing / restored materials in combination with select energy improvements has a reduced impact on both embodied and operational carbon footprint and reduced construction waste.

Characteristics of historic industrial sash windows typically include small pane sizes with narrow muntin and frame profiles fabricated in true divided lites, which result in variable light refraction due to the nature of setting individual panes of glass. This should be considered if proposing to use a simulated divided lite replacement. The windows are quite visually accessible from the sidewalk, so the details of original fabrication, profiles, and assembly should be carefully documented and matched to retain the character of the originals.

In kind replacement windows such as Hope’s Windows One55 Series or Old World Suite, with an arrow profile muntin and similar sight lines may be a suitable product.



Press Release
Publish Date: November 7, 2013

www.hopeswindows.com Page 3 of 3

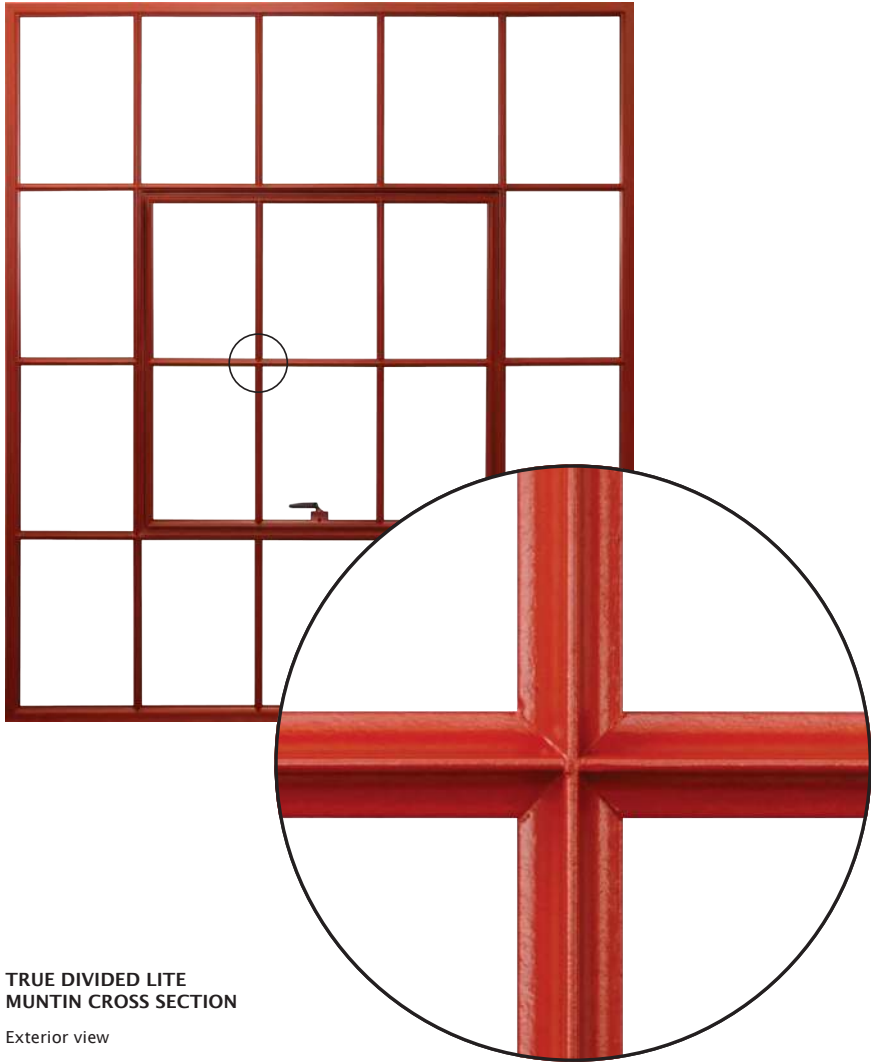
For a BEFORE and AFTER view of the windows for the Building 155 project at Pearl Harbor, please refer to photo below.



BEFORE and AFTER view of the Hope's Pearl Harbor Building 155 historic preservation project

PHOTO CREDIT (for all images): Danielle Jones, Pearl Harbor Naval Shipyard/Intermediate Maintenance Facility

Hope's One55™ Series
Fixed, Projected, Casement and Horizontally Pivoted Steel Windows

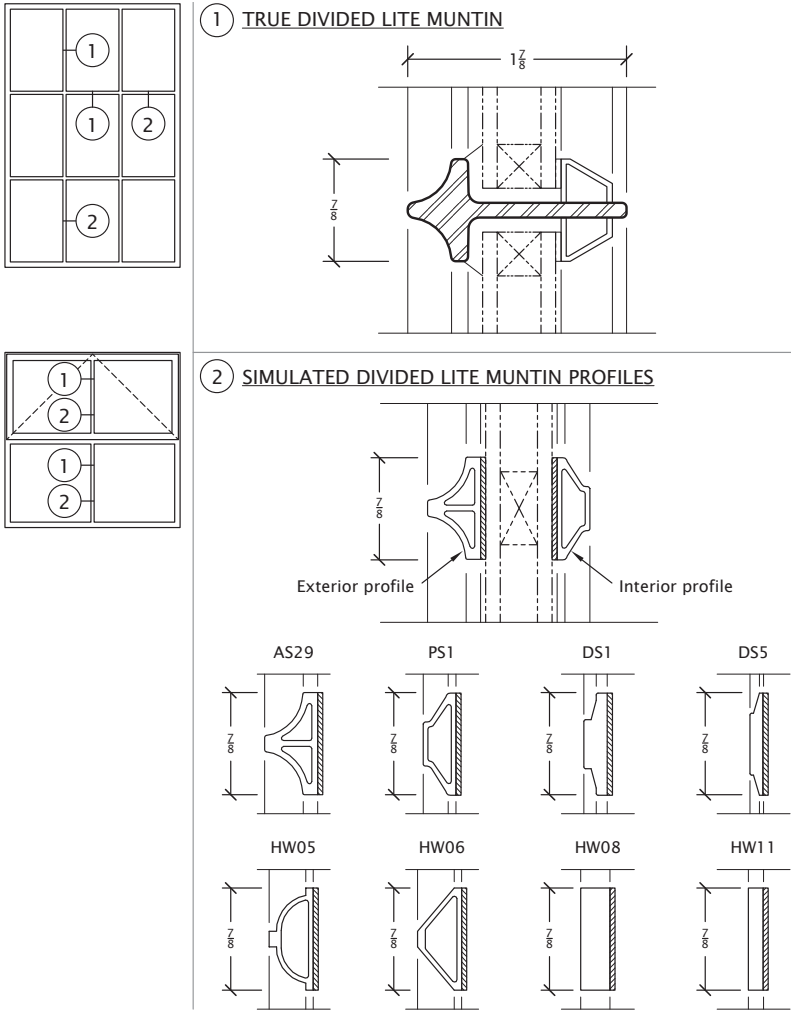


TRUE DIVIDED LITE
MUNTIN CROSS SECTION
Exterior view

©2011 Hope's Windows, Inc.



ONE55™ SERIES
Steel Window and Door
Muntin Details



Details are full scale.
All Hope's products are custom manufactured to your specific project requirements.

10

©2011 Hope's Windows, Inc.

Hope's Windows

The following window provider was included as a manufacturer for replacement with an extensive history in providing quality solutions for this type of project. There is flexibility to customize the window lites in size and shape to match what currently exists in the landmark structure. The window replacement was highly recommended in terms of durability, finish, energy performance and longevity compared to the option of repairing the old steel windows, which have fallen into disrepair. Additionally, the mezzanine windows will be these Hope's windows, as well as the alley windows. By replacing all the windows on the project we will match the aesthetics across the landmark structure and improve the longevity of the building.



GRAPHITE

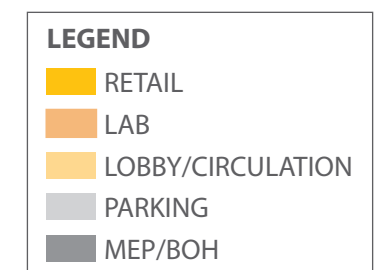
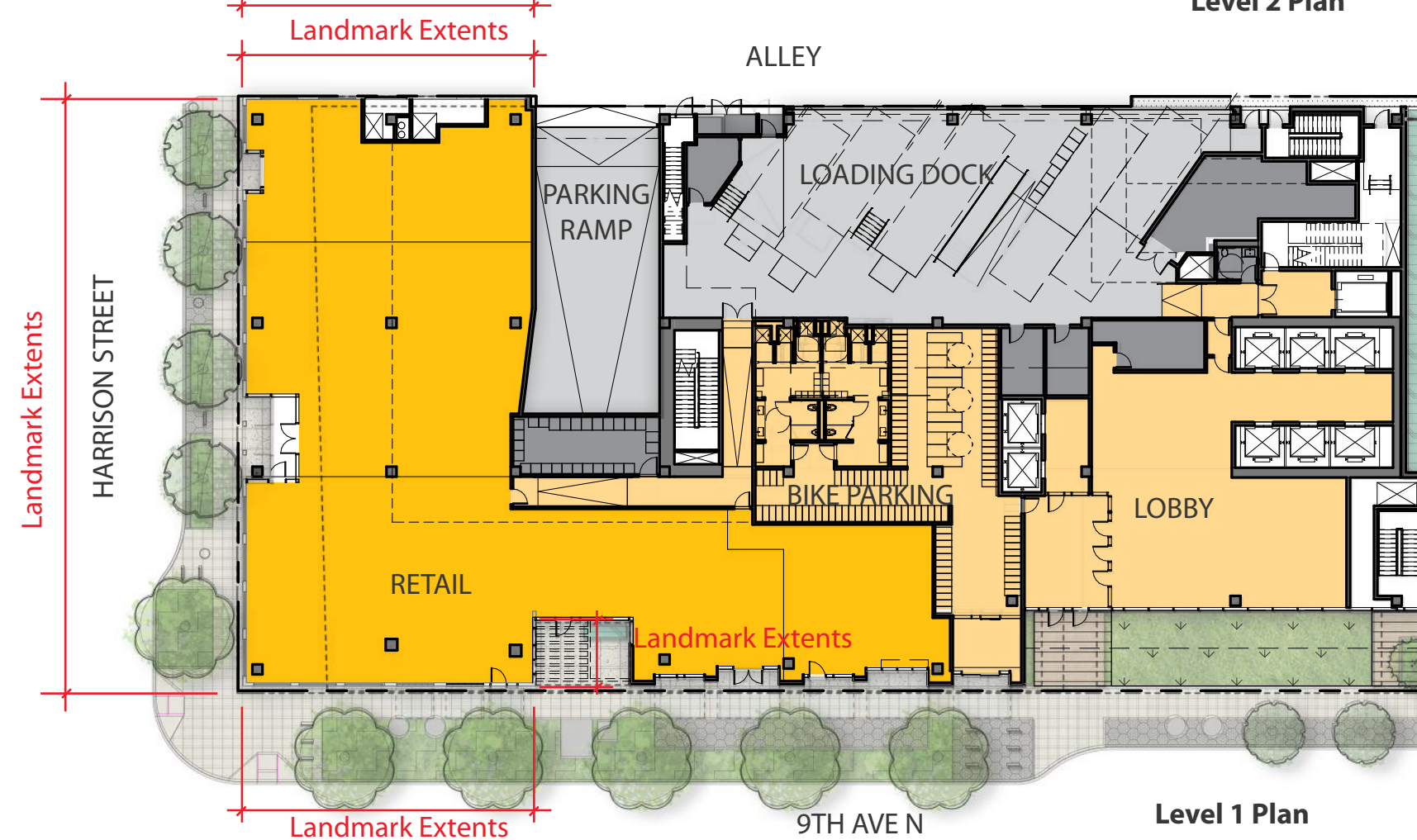
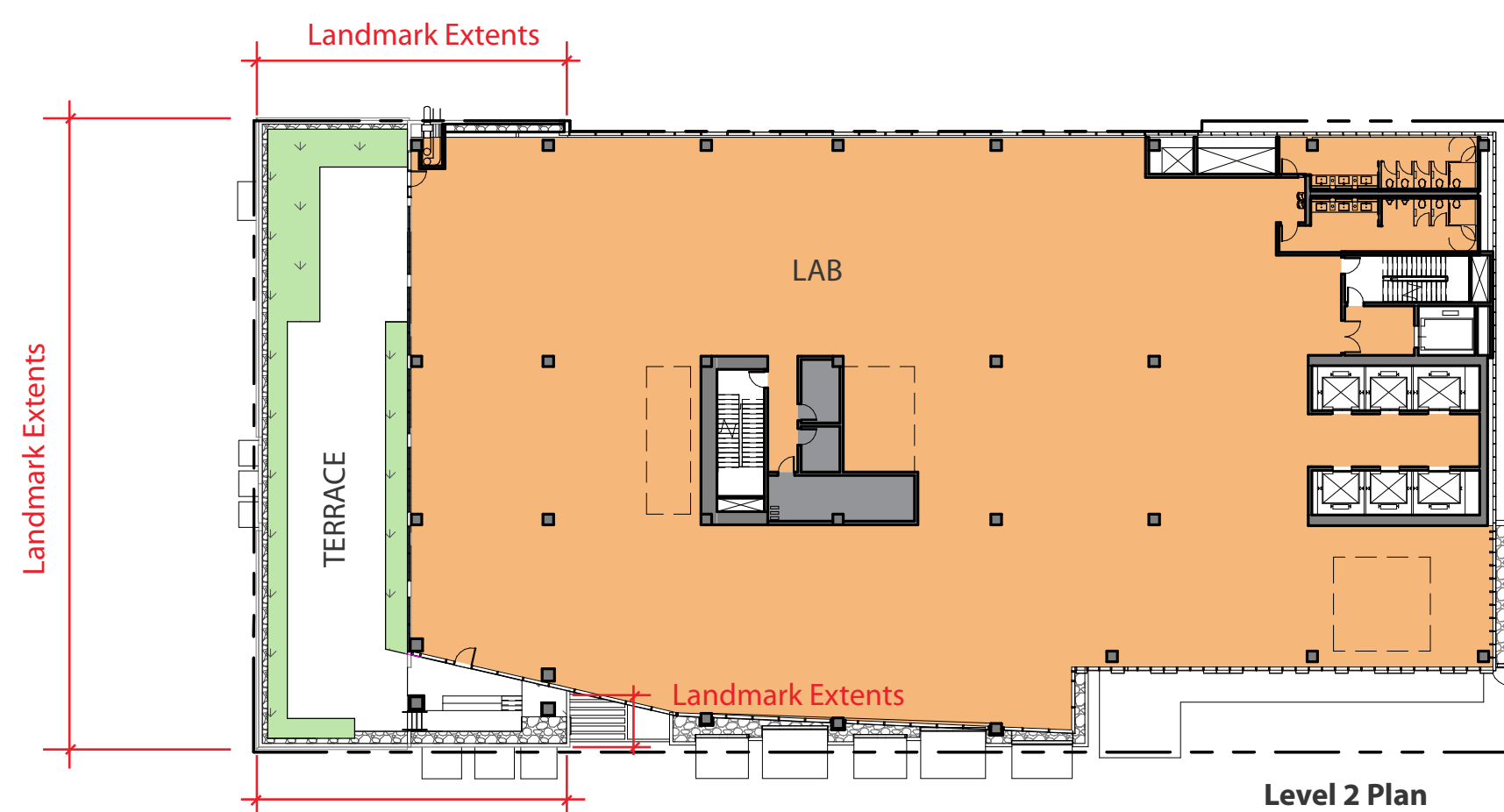
312 9th Ave N | ARC #3 | February 11, 2022

2. | Landmark Changes

Proposed Landmark Modifications:

- 1. Activate Harrison Street Entry
See page 13
- 2. Remove chimney
See page 13
- 3. Occupy roof as terrace with planting between terrace and historic parapet
See page 10
- 4. Add Harrison Street retail entry integrated into the historic facade
See page 13
- 5. Addition of glass canopies at retail nodes
See page 13 & 14
- 6. Remove and reconstruct the north mezzanine wall in manner consistent with historical condition
See pages 13, 17 and 18
- 7. Modify north mezzanine & openings to integrate new construction
See pages 13, 17 and 18
- 8. Remove and reconstruct south facade (southwest corner of landmark structure) in manner consistent with historical condition
See page 15 and 18
- 9. Modify south facade upper openings to integrate new construction
See page 6, 13, 15 and 18
- 10. Modify Main Entry Vestibule for retail visibility
See page 18

- Alterations approved in prior Certificate of Approval for this site
- Alterations supported in ARC #2 meeting on 10/15/2021
- Alterations discussed in ARC #2 meeting on 10/15/2021



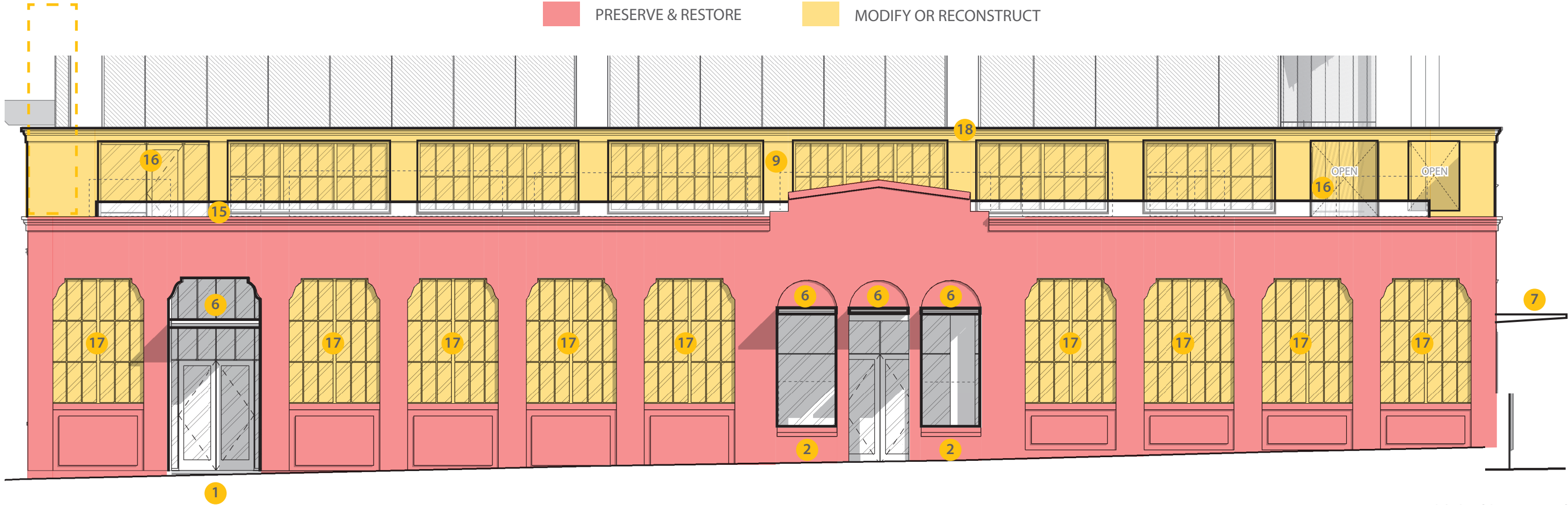


PROPOSED FEATURES

- | | |
|---|----------------------------------|
| 1. NORTH ENTRY | 10. WEST MEZZANINE WALL OPENINGS |
| 2. ENLARGED NORTH MAIN ENTRY | 11. EAST WINDOW BAYS |
| 3. WEST WINDOW BAY | 12. SCL TRANSFORMER EXHAUST |
| 4. WEST ENTRY | 13. GENERATOR EXHAUST |
| 5. SOUTH ENTRY | 14. EXHAUST LOUVER |
| 6. CANOPY - NORTH | 15. TERRACE GUARDRAIL |
| 7. CANOPY - WEST | 16. TERRACE ACCESS |
| 8. SOUTH MEZZANINE WALL OPENINGS | 17. REPLACE EXISTING WINDOWS |
| 9. NORTH MEZZANINE WALL, WINDOWS, & ENTRY, OPENINGS | 18. RAISE CORNICE |

PRESERVATION STRATEGY

- | | |
|--|---|
| PRESERVE & RESTORE | MODIFY OR RECONSTRUCT |
|--|---|



ENLARGED NORTH ELEVATION
1/8" = 1'-0"

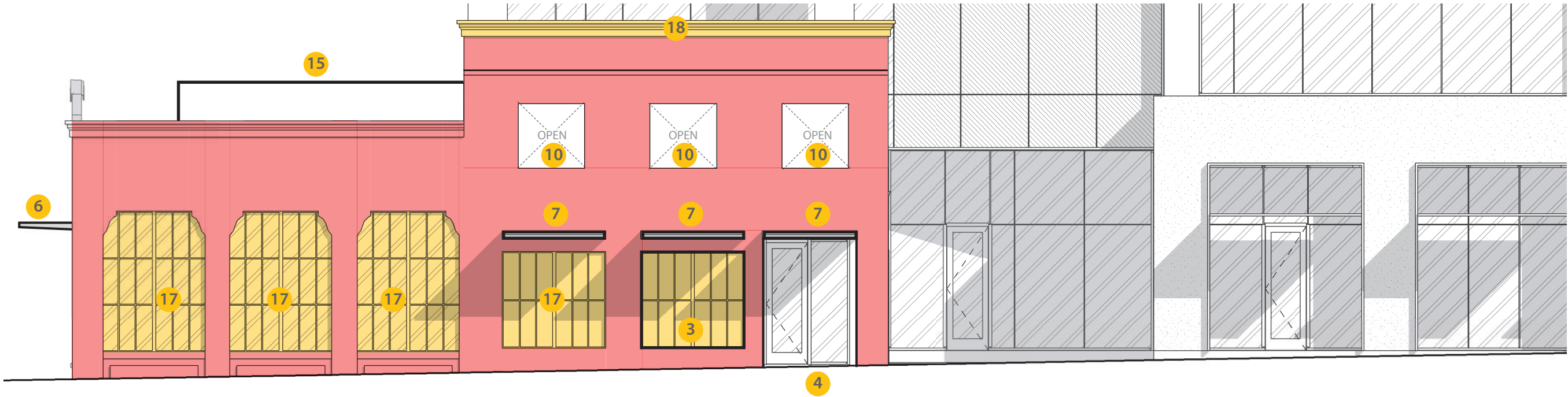


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PRESERVATION STRATEGY

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|--|---|
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ENLARGED WEST ELEVATION
1/8" = 1'-0"

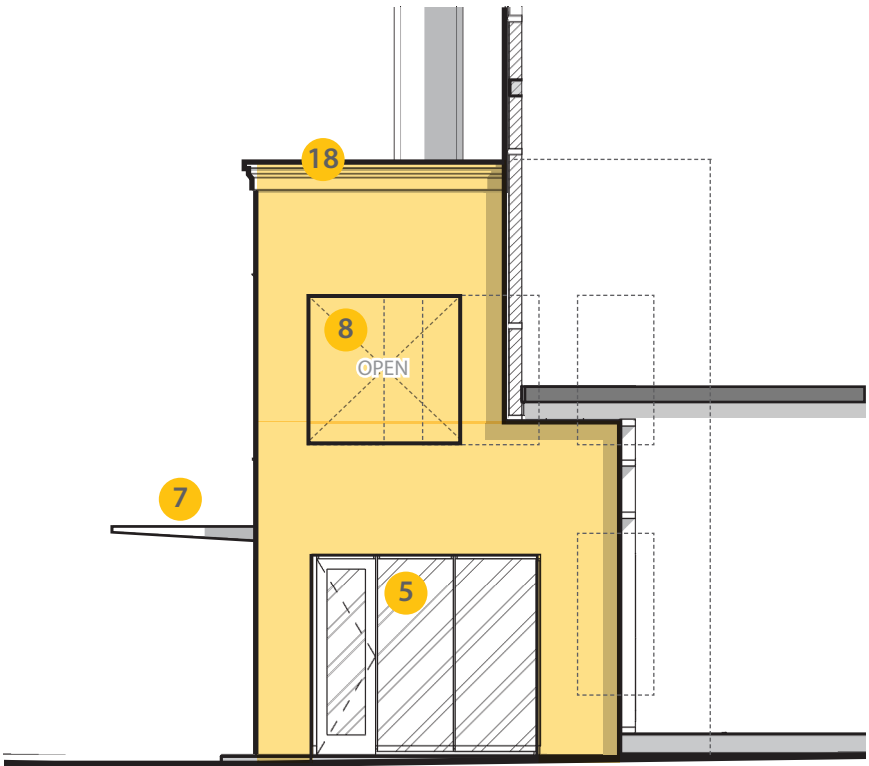


PROPOSED FEATURES

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PRESERVATION STRATEGY

- | | |
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ENLARGED SOUTH SECTION ELEVATION
1/8" = 1'-0"

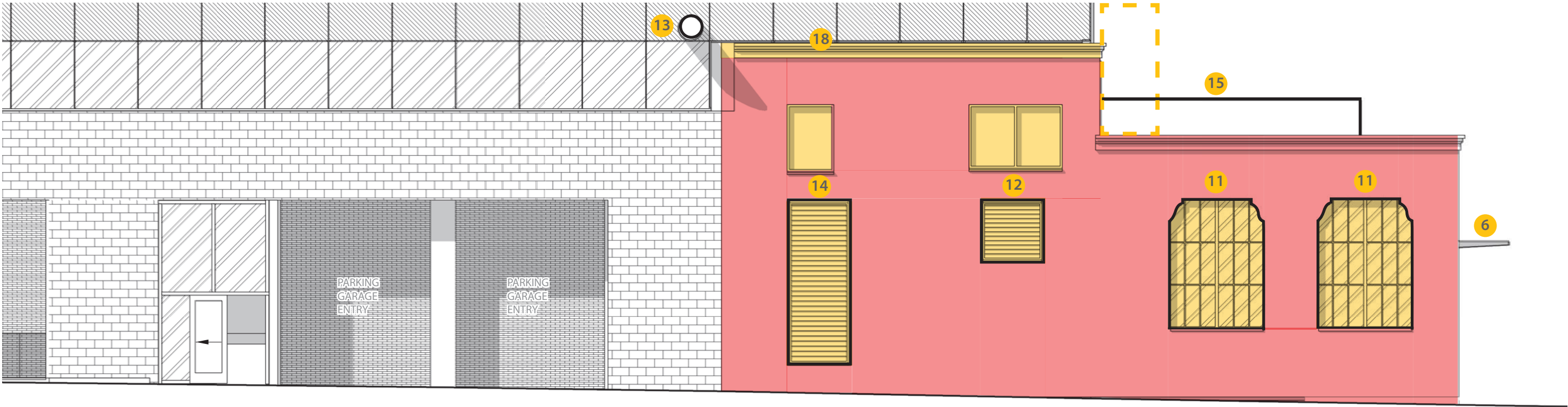


PROPOSED FEATURES

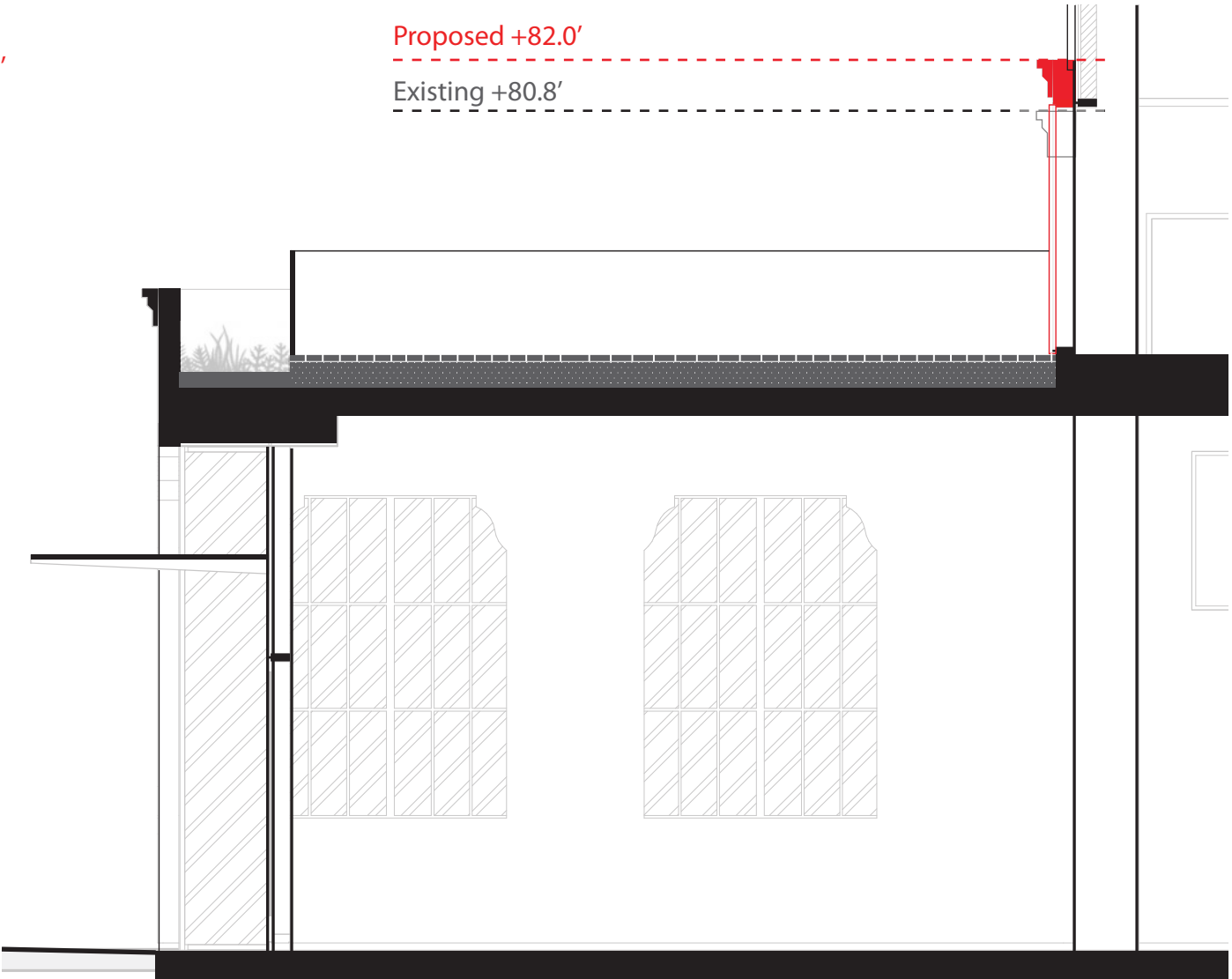
- | | |
|---|----------------------------------|
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PRESERVATION STRATEGY

- PRESERVE & RESTORE MODIFY OR RECONSTRUCT

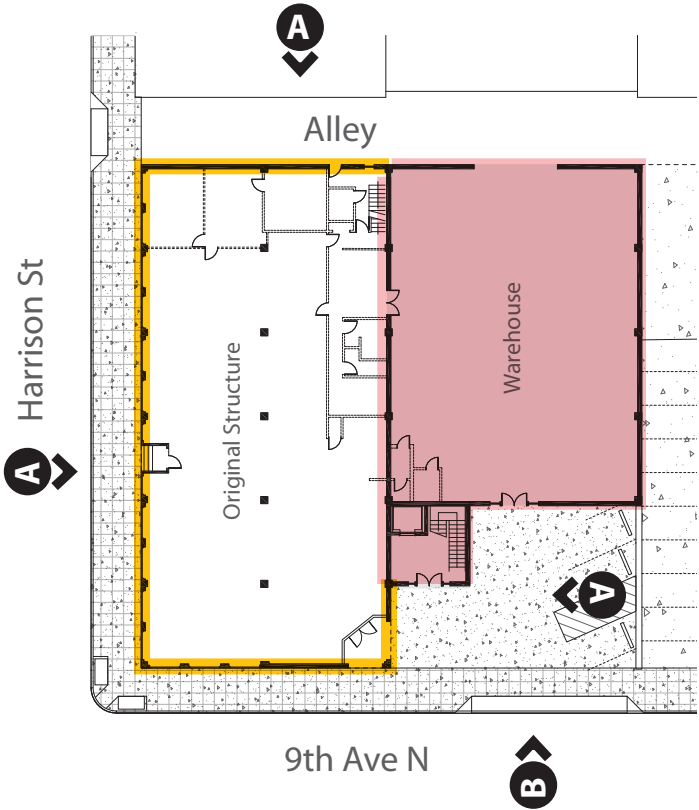
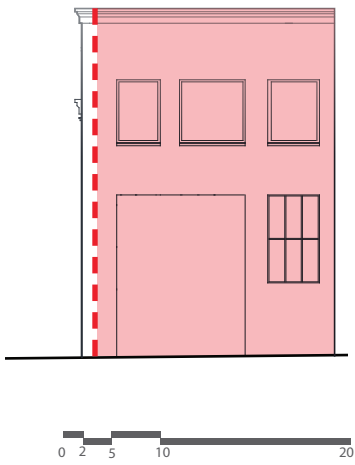
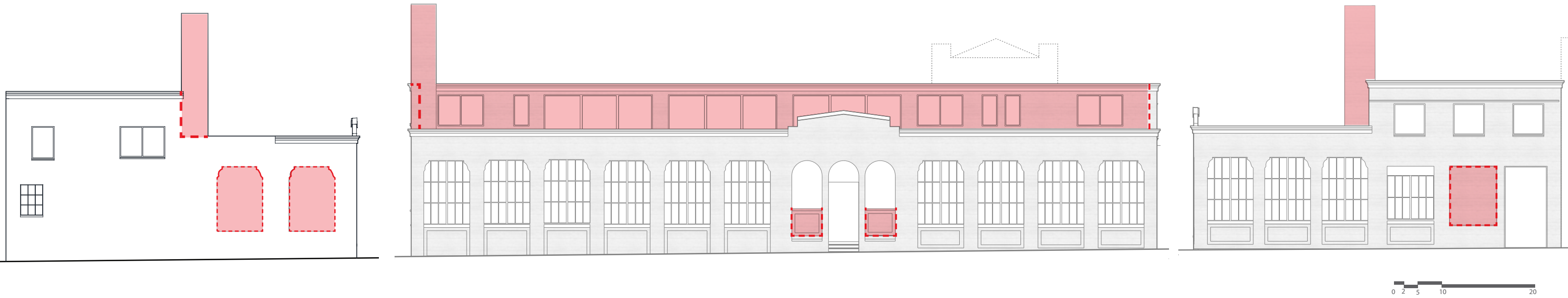


ENLARGED EAST ELEVATION
1/8" = 1'-0"



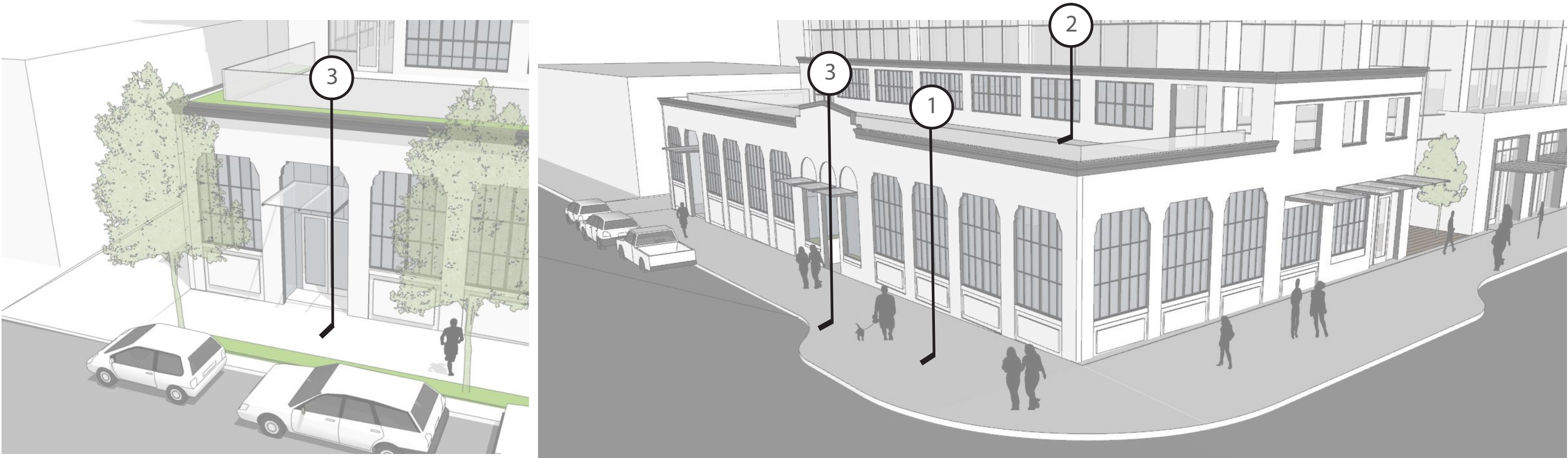
Raised Mezzanine Height

The building's current mezzanine height is at a low dimension to accommodate a new window at Level 2 to provide appropriate ceiling heights and daylighting opportunities. Since the mezzanine's north facade is being removed and rebuilt with modifications to the window sizes to maximize the daylighting opportunities and provide more window design organization, the opportunity to raise the mezzanine trim by less than 2' will provide an adequate solution for the new project while preserving the character of the landmark structure.



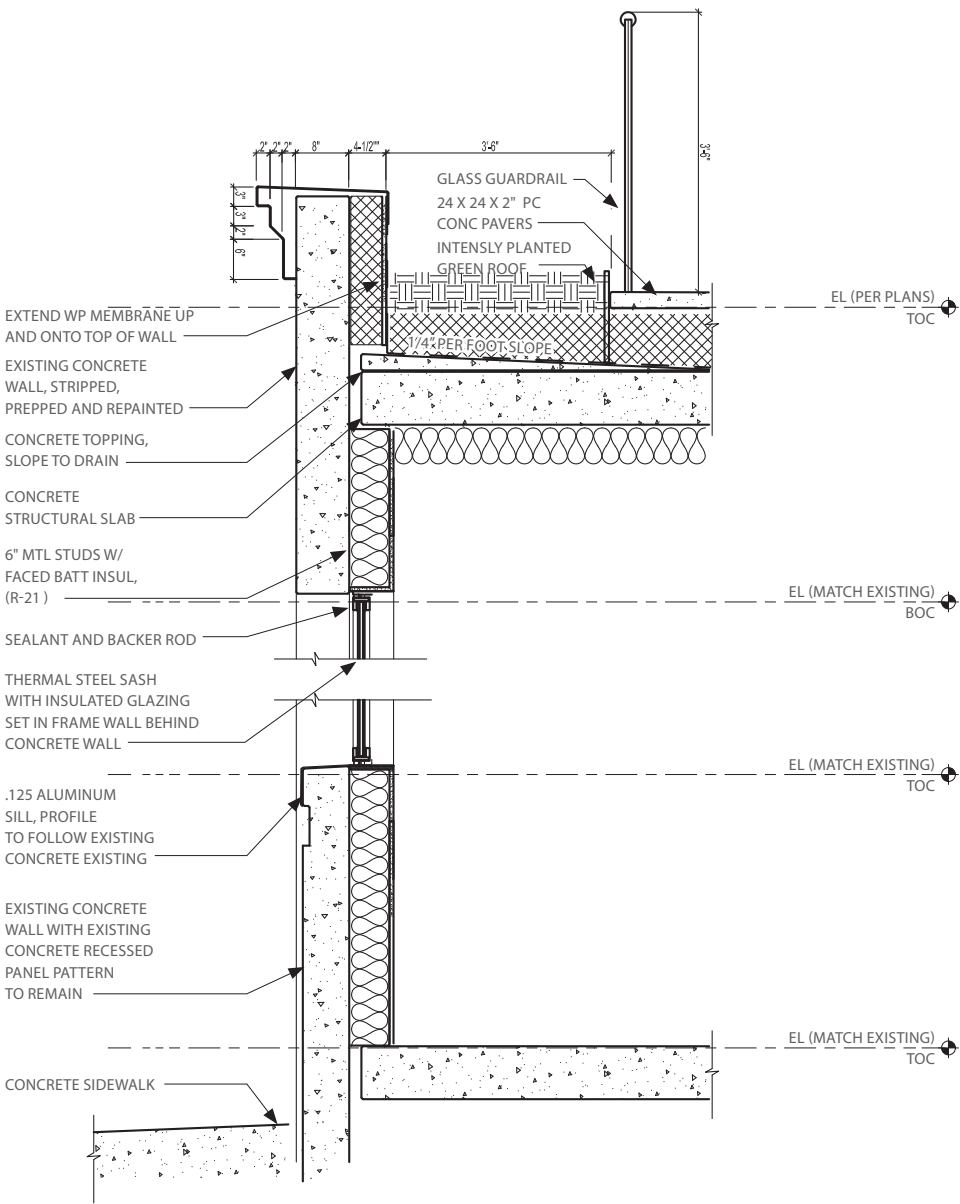
- - - Proposed Saw Cut Edges
- Proposed Facade Removals

3. | Rec. Proposed Design

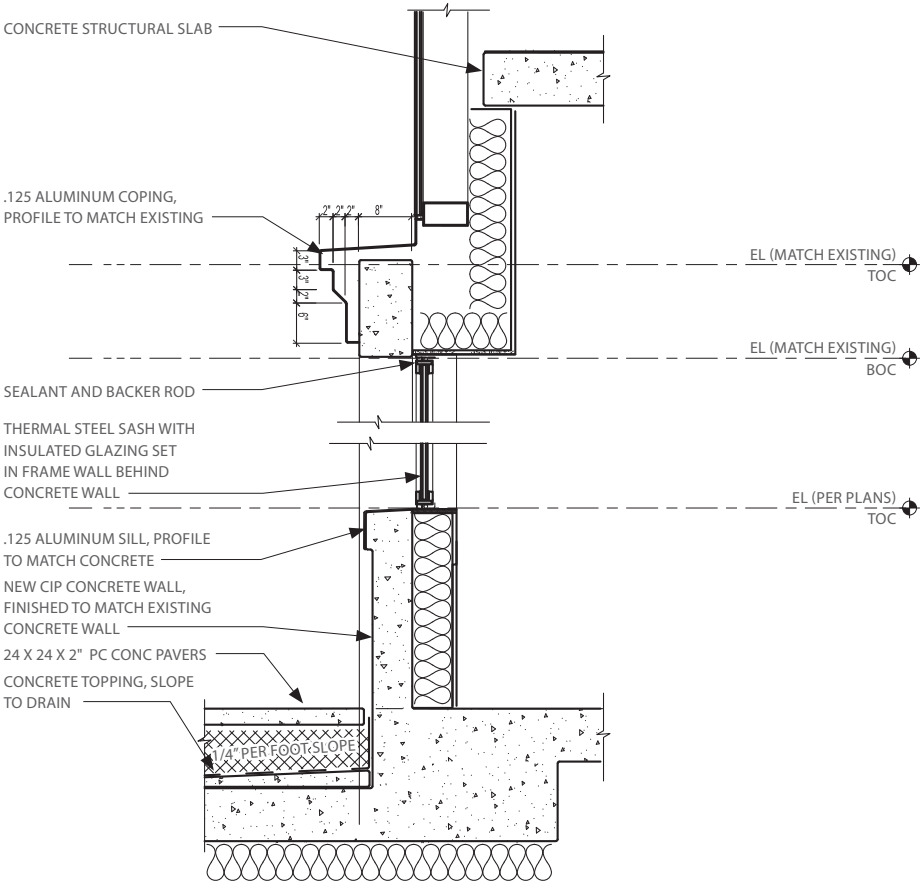


Landmark Details

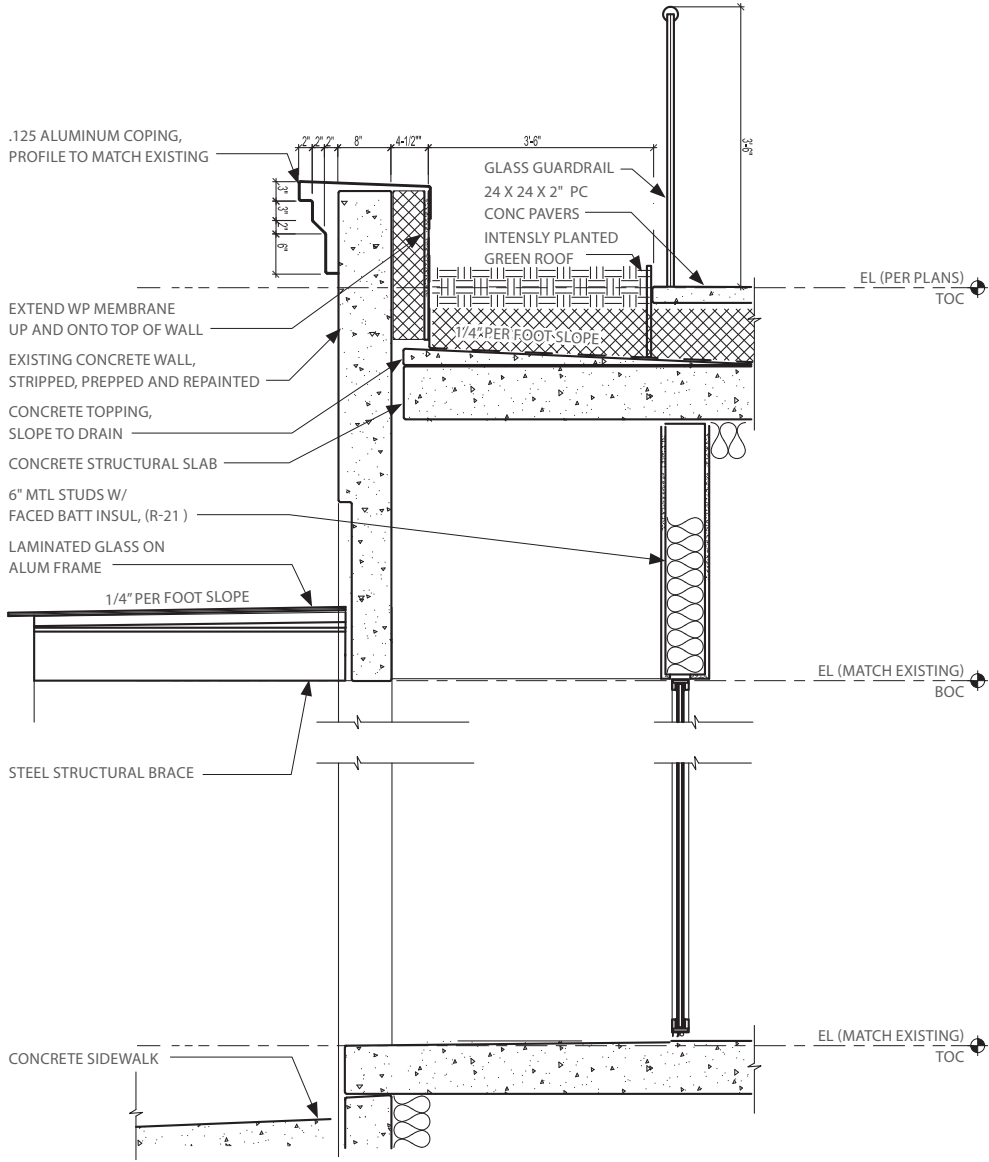
The following conditions cover the extents of landmark modifications in detail format. These include the added retail entry on Harrison Street, the main retail entry on Harrison Street, the new window replacements and interior wall condition and the new mezzanine detail connecting to the new tower. The details are on the following page.



1 LANDMARK BUILDING WALL SECTION AT GRADE
3/8" = 1'-0"



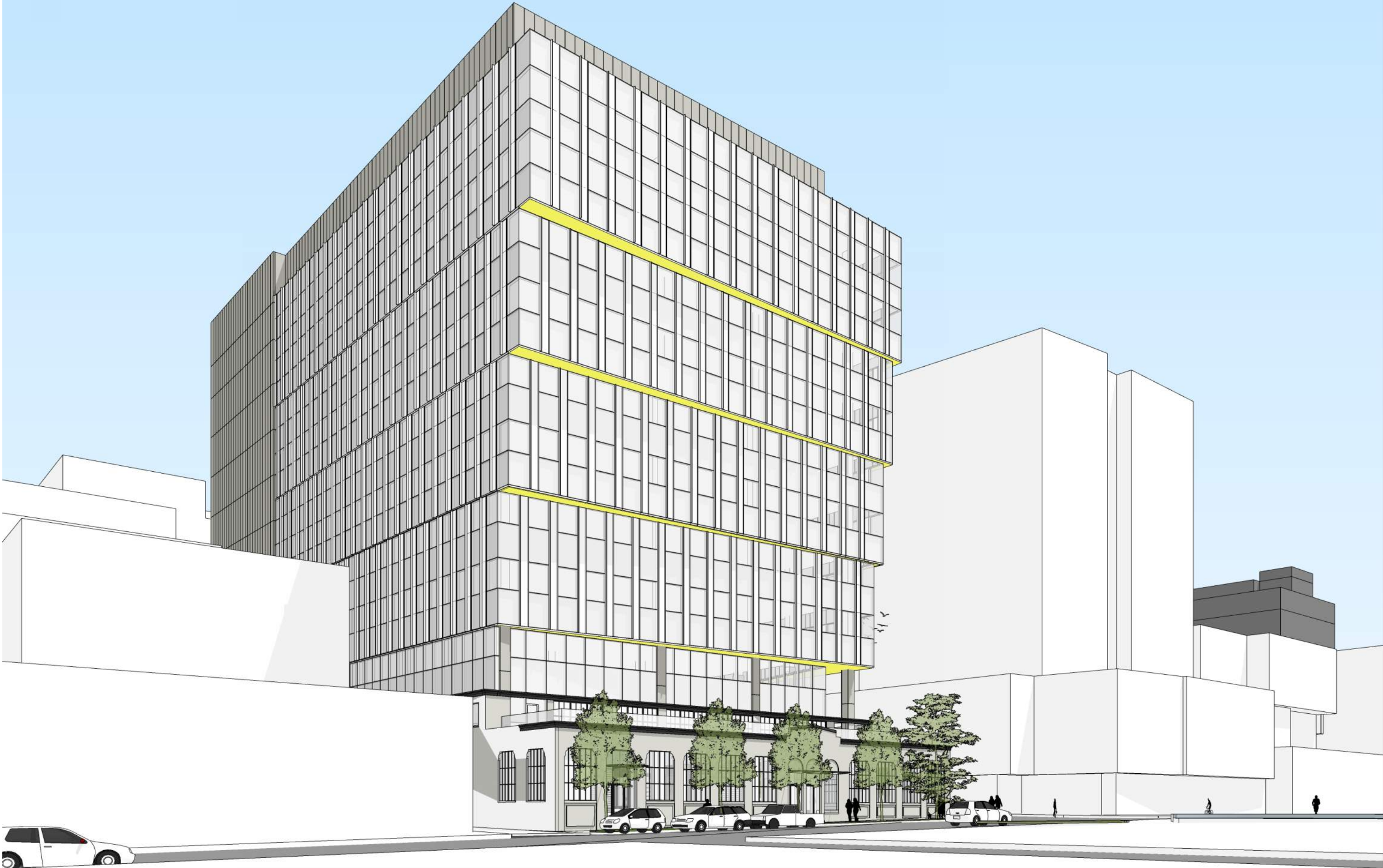
2 LANDMARK BUILDING WALL SECTION AT TERRACE
3/8" = 1'-0"



3 LANDMARK BUILDING WALL SECTION AT ENTRANCE
3/8" = 1'-0"









Synthesis

Buildings are an expression of our time, technology and aspirations. The original sand and gravel warehouse embraced the then-innovative material of concrete, rendered in a form that reflected it's utilitarian use with modest decorative flourish. Responding in kind, the proposed intervention preserves the essential character of the original structure while embracing contemporary materials and building technology. The synthesis of the two aspires to foster an architectural dialog about form, technology and time.

1920's



City
Space for the Expansion of Industry

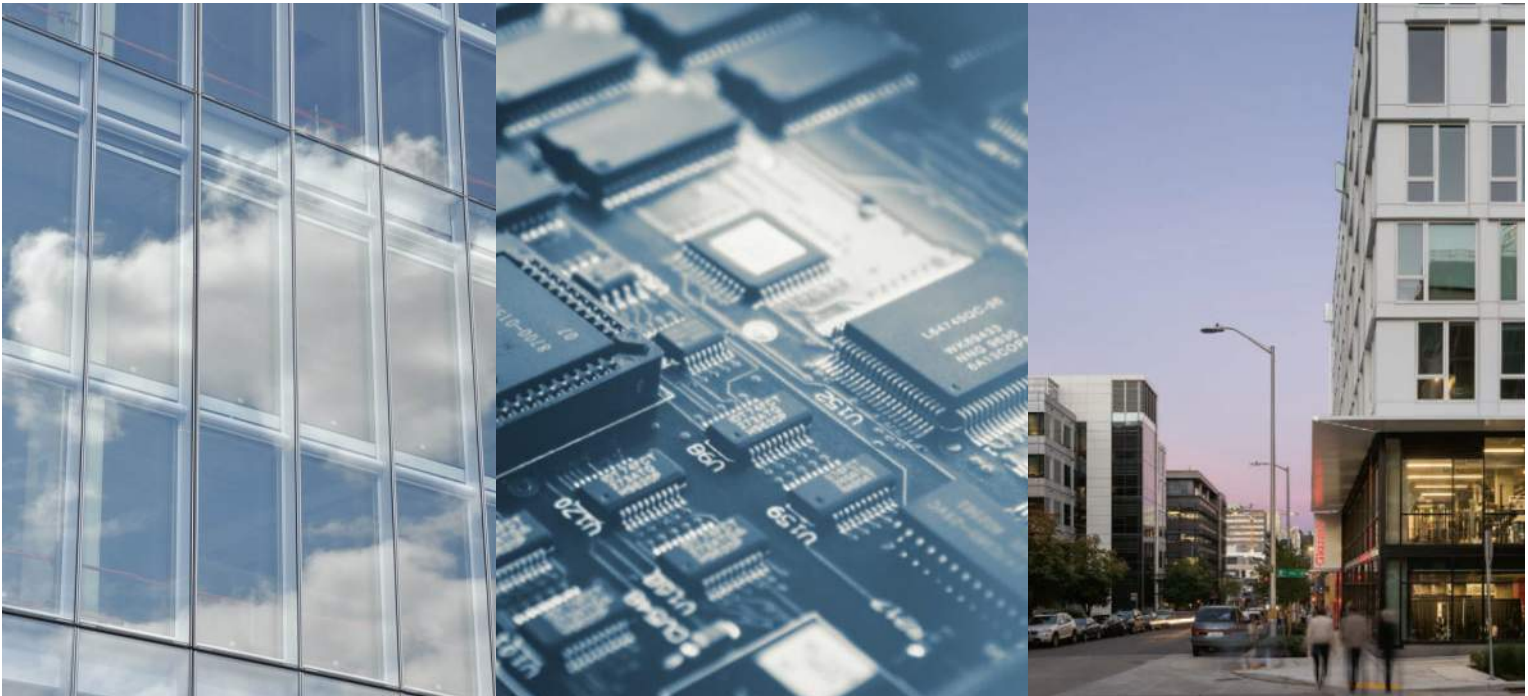
Industry
The Built Environment

Material
Carved Textured Material

Material
Consistent Smooth Material

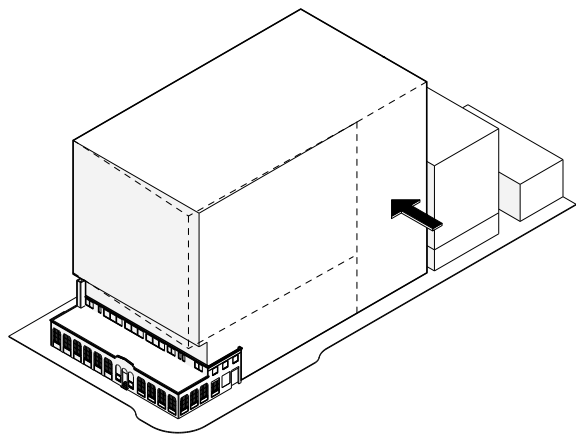
Industry
The Digital Environment

City
Space for the Expansion of Industry



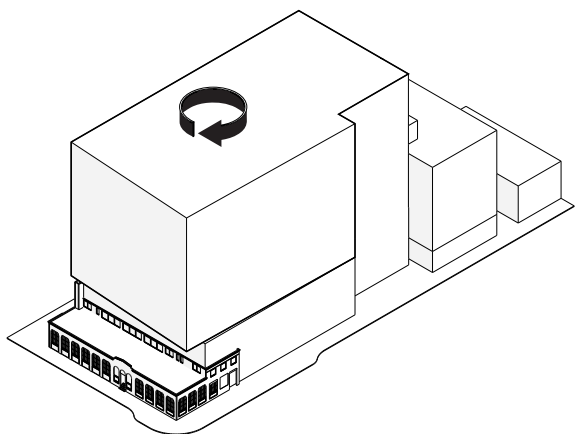
2020's

1. Modulate



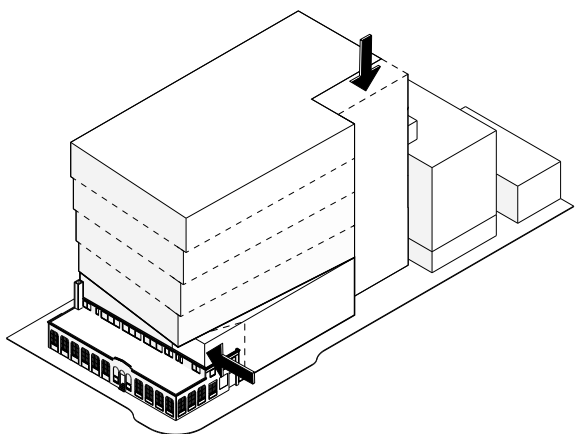
Utilize the building modulation requirements to emphasize the entrance at grade.

2. Twist



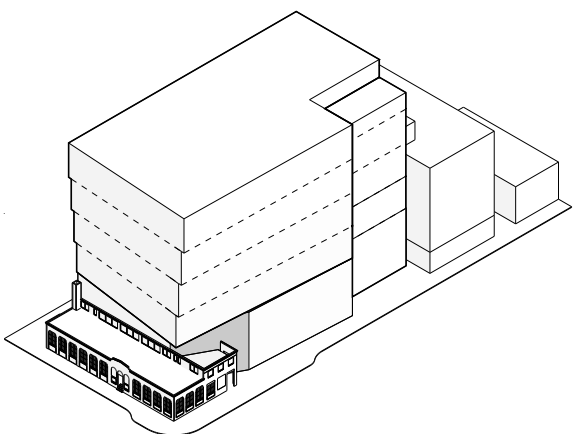
Breaking the rigid form of the city grid, twist the tower to engage diagonal view corridors

3. Carve

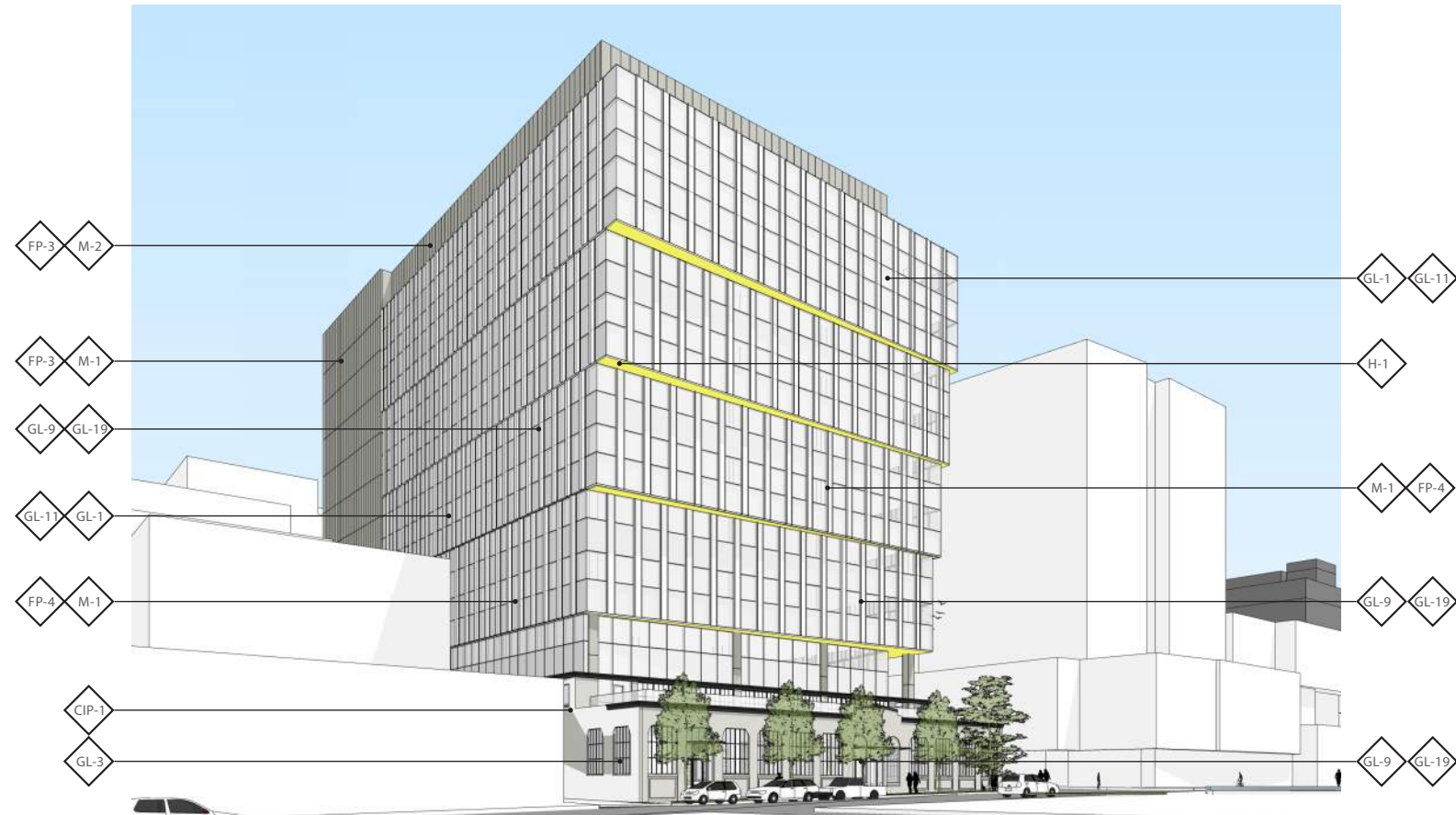


Carve out space between prominent building features and express voids as articulation

4. Sculpt



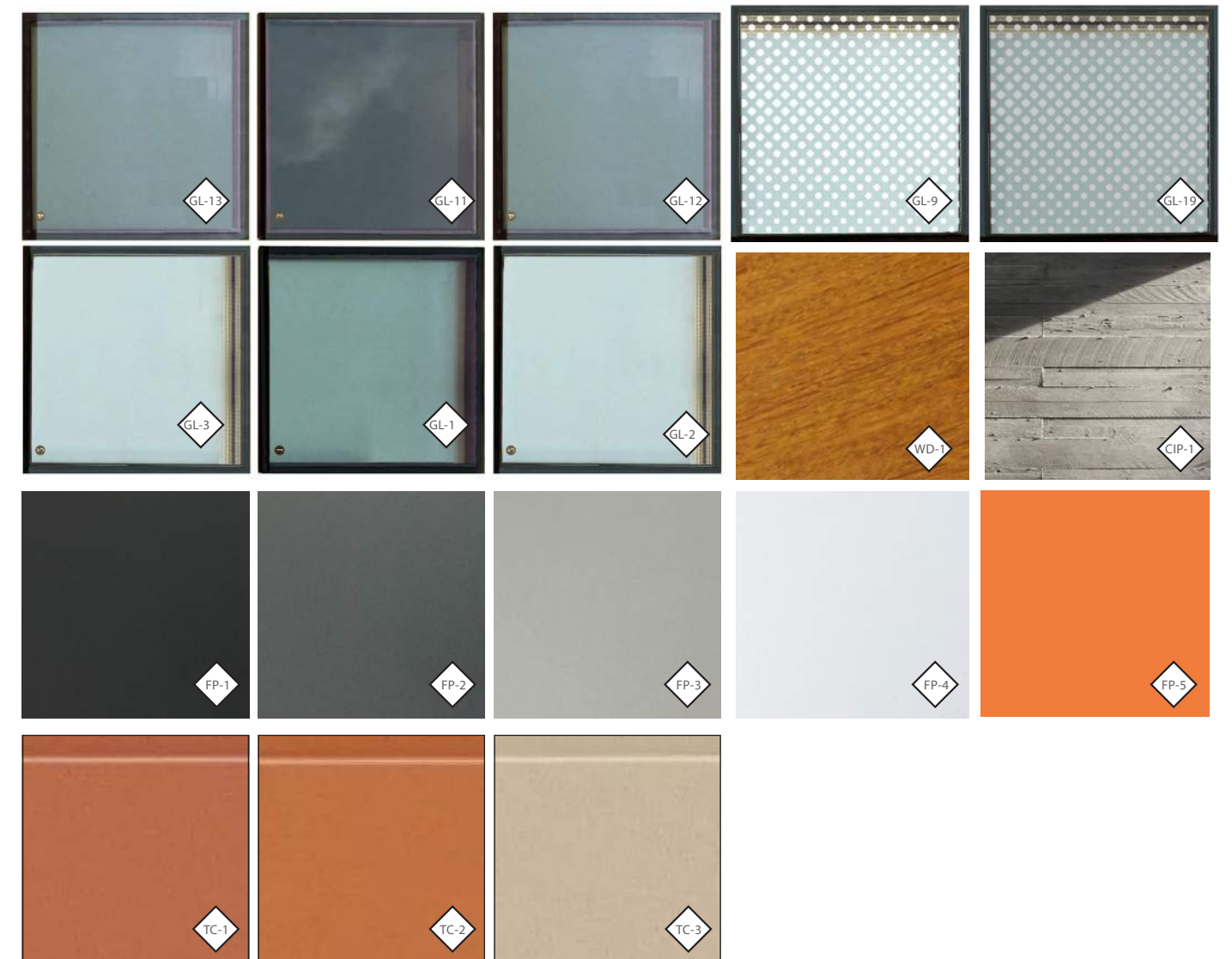
The result is a sculpted tower that rises and breaks from the modular form of the ground level & city grid.


























Harrison Street view looking Southwest



9th Ave N view looking Northeast



- | | | | |
|---|---|---|---|
|  Tower Vision Glass |  Fritted Accent Glass |  Metal Panel |  Yellow |
|  Tower Spandrel Glass |  Fritted Accent Spandrel |  Metal Screen (FP-3) |  Dark Gray |
|  Storefront Vision Glass |  Wood |  Metal Soffit (FP-5) |  Medium Gray |
|  Storefront Spandrel Glass |  Cast In Place Concrete |  Glass Canopy (GL-1) |  Silver Gray |
|  Landmark Vision Glass |  Dark Terracotta |  Guardrail (GL-1) |  White |
|  Landmark Spandrel Glass |  Medium Terracotta |  Light Terracotta | |